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ABSTRACT

Rural high school students tend to stereotype according to sex when rating their peers on personality trait and occupational measures. The research differed from previous studies in which participants have been required to rate the typical or ideal male and female or to rate an occupation according to how masculine or feminine it seemed to them. In this study, 102 rural high school sophomores (53 males and 49 females) rated themselves, 4 female friends, and 4 male friends on personality and occupational scales consisting of 16 bipolar items each (e.g., aggressive-passive; doctor-nurse). Both males and females rated themselves and their peers differently according to sex. On the personality trait scale, males' ratings of others were biased toward the masculine stereotype while females' ratings were biased toward the feminine stereotype. Males and females rated themselves and members of the same sex more stereotypically on the personality measure than they rated members of the opposite sex. On the occupational measure there were significant differences between the ratings of males and females when rated by themselves, members of the same sex, and members of the opposite sex. These findings differ from findings in other studies. (KC)

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SEX-STEREOTYPING IN HIGH SCHOOL STUDENTS' PERCEPTIONS OF SELF AND PEERS ON PERSONALITY TRAIT AND OCCUPATIONAL SCALES

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PERCEPTIONS OF SELF AND PEERS ON
PERSONALITY TRAIT AND OCCUPATIONAL SCALES

ABSTRACT

This study examined sex-stereotyping among rural high school students according to their ratings of themselves and their peers on a personality trait and occupational scale. One-hundred and two rural high school sophomores (53 males and 49 females) rated themselves, four female friends, and four male friends on both scales, each consisting of 16 bipolar items. The results of an analysis of variance showed the main effects for both sex of rater and identity of ratee (self, other males, other females) and their interaction to be significant on both scales. Both males and females rated themselves and their peers differently according to sex. Also, on the personality trait scale, males' ratings of others were biased toward the masculine stereotype while females' ratings were biased toward the feminine stereotype. An analysis of the interaction effects showed that males and females rated themselves and members of the same sex more stereotypically on the personality trait measure than they rated members of the opposite sex. On the occupational measure, there was no bias according to sex or rater, but there were significant differences between the ratings of males and females when rated by themselves, members of the same sex, and members of the opposite sex. The paper relates these finds to comparable research, commenting specifically on inconsistencies between the results of personality ratings obtained in this study and those found by other researchers.

SEX-STEREOTYPING IN HIGH SCHOOL STUDENTS'
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Sex-stereotyping has become a primary concern for those involved in career education. The central question of this research has been "to what degree do sex-stereotypes affect students' ultimate career selection?" Before such a question can be adequately answered, researchers must address two preliminary questions: 1) How do students categorize personality traits according to gender? and 2) How do students categorize careers according to gender? Until we can reliably measure the degree to which students hold stereotypes regarding careers, it will not be possible to determine how these stereotypes affect their decisions.

While a variety of studies have been conducted on sex-stereotyping and personality traits (Broverman et. al., 1972; Spence, Helmreich & Stapp, 1975; Erdwins, Small, Gessner & Gross, 1978; Storms, 1979) and on sex-stereotyping and careers (Tibbetts, 1975; Shinar, 1975; Scheresky, 1978), serious criticisms have been raised regarding the instruments used in these studies (Constantinople, 1973; Beere, 1979). One of the criticisms has been that the instruments have required students to rate the "typical," "average" or "ideal" male and female. Or, in the case of the occupational measures, students were asked to rate an occupation according to how masculine or feminine it seemed to them. Wesley and Wesley (1977) pointed out a perceptual difficulty involved with this approach; they suggested that there often may be confusion as to whether subjects are reporting what

they themselves think or if they are reporting what they believe others (e.g. peers, parents or society) think or want them to think.

Raters may respond in certain ways not because they view the sexes in those terms but because raters feel they are supposed to view the sexes that way. Some raters may respond with rigid stereotypical answers because they envision the traditional male/female, while other raters imagine the more contemporary nontraditional male/female and respond in a more androgynous way.

In order to avoid the measurement problems associated with rating abstractions such as "ideal male," Kelly (1955) and Lanfield (1971) have developed another measurement technique. The method has been used primarily by clinicians to evaluate clients' "personal constructs" by having clients rate actual acquaintances according to a list of personality traits. By having raters think of actual acquaintances, it has been suggested that validity will be increased. While the "personal constructs" approach has been well documented in clinical settings, no research applying this measurement technique to the area of sex-stereotyping has been published.

The purpose of this study was to examine sex-stereotypes reflected in rural high school students' ratings of themselves and their peers on personality trait and occupational scales. The following questions were addressed in the present study:

Are actual acquaintances rated differently according to their sex on both personality trait and occupational measures?

Earlier studies suggest that there are marked differences between how the sexes are rated when abstract constructs such as the "average" male or female are used (Spence, Helmreich & Stapp, 1975; Erdwins, Gessner, Small & Gross, 1978). This study will examine if similar differences are found when specific individuals are rated.

Do males and females rate others differently regardless of the sex of others?

Previous research has identified a rater bias according to the sex of the rater in a variety of contexts (McMordie & Swint, 1979; Karpicke, 1980). This study will determine if a rater bias occurs when others are rated according to personality and occupational dimensions.

Do students perceive themselves and members of their same sex the same as they perceived by the opposite sex?

Results from several studies suggest that individuals see themselves less stereotypically than they are perceived by members of their same sex or members of the opposite sex. (Rosenkrantz et al., 1968; Storms, 1979). Will this same pattern persist when students rate actual referents as opposed to abstract referents?

METHOD

Subjects. A total of 102 sophomore students from two rural high schools participated in the study. Of the 102 students in the total sample, 53 were males and 49 were females.

Instruments and Procedure. Sixteen pairs of bipolar adjectives representing traditionally male and female characteristics were selected for the personality trait instrument (e.g. aggressive-passive, emotional-unemotional, intelligent-unintelligent). Twelve of these 16 pairs coincided with attributes previously used on the Sex Role Stereotype Questionnaire (Rosenkrantz et al., 1968) and the Personal Attributes Questionnaire (Spence, Helmreich & Stapp, 1974). These bipolar adjectives were placed as the endpoints of a five-point scale. Respondents were asked to rate themselves and others according to the point on the scale which best represented their perceptions of the persons being rated. If any of the adjectives did not seem applicable, respondents were to mark zero.

For the occupational instrument, 16 pairs of traditionally male and female occupations were selected depicting different career categories (e.g. doctor-nurse, architect-interior designer, store manager-cashier, telephone repair-telephone operator). Occupations were selected which would represent a variety of income levels, educational backgrounds, and interests. At least 18 of the 32 occupations used on this instrument had already been examined in a previous study (Shinar, 1975) and had been rated as moderately to extremely sex typed. As on the personality trait instrument, a scale of 1 to 5 was placed between each career pair. Respondents were asked to imagine that the person they were rating was interested in each field (e.g. medicine) and then to determine which career that person would be more likely to choose in that field (e.g. doctor-nurse). Respondents were also given the

option of marking a zero if they did not know how to respond to a particular item.

When the instruments were administered, students were given both scales concurrently. Before beginning, students were asked to write the names of four female friends and four male friends in the designated places on both the personality trait and occupational scale rating sheets. Then they were to rate themselves and the same 8 persons (4 males and 4 females) on both instruments. Students were given as much time as they needed to complete their ratings.

Both the occupational and personality trait instruments used in this study were designed to be similar in format to Kelly's (1955) Repertory Grid Test (Rep Test). Consequently, the reliability of these measures was considered to be contingent on the proven reliability of similar measures. Fjeld and Landfield (1961) found a high consistency in the results of the Rep Test over a two week period when subjects were given the same acquaintances and bipolar constructs used on the first test (percentage of agreement on test-retest=83%; contingency co-efficient=.80).

Data Analysis. The ratings from both the personality trait and occupational instruments were coded so that for each adjective or occupational pair "1" represented the masculine end of the continuum and "5" the feminine end of the continuum. Means were computed by summing over the 16 ratings on both instruments so that each person rated by the 102 respondents received a mean rating for the personality trait scale and a mean rating for the occupational scale. This process generated a pair of means for over 760 cases.

The mean results from both instruments were analyzed with an analysis of variance (ANOVA) using a 3 factor mixed design with repeated measure on one factor. The data were analyzed using a computer program which would

account for unequal cell sizes. The factors of interest were high school, sex of rater, and identity of ratee (self, other males, other females).

RESULTS

The results of the ANOVA for the personality trait and occupational instruments are summarized in Tables 1 and 2 respectively. The effect of high school was deleted because it was not found to be significant in either analysis.

The main effect for identity of ratee (self, other males, other females) was significant on both scales ($p<.001$). Pairwise comparisons (Scheffe, $p<.05$) revealed significant differences between the mean ratings for males and females on the personality trait measure (male $\overline{X}=2.03$, female $\overline{X}=2.66$) and on the occupational measure (male $\overline{X}=2.03$, female $\overline{X}=3.64$). These results demonstrate that males and females rated their acquaintances differently according to sex on both scales.

The significant sex-of-rater effect shown in Tables 1 and 2 for both measures indicates that there was a difference between the ratings made by males and females. To determine if males and females were biased in their ratings of others, regardless of sex, the self-ratings were excluded from the analyses. (Had the self-ratings been included, an analysis bias would have been introduced because males would have been rating more males and females rating more females.) The sex-of-rater effect was tested using a one-way analysis of variance for both scales. A significant sex-of-rater effect was found on the personality trait measure $F(1,660)=10.30$, $p<.001$. Male ratings of both sexes ($\overline{X}=2.54$) showed a bias toward the masculine stereotype compared with female ratings of both sexes ($\overline{X}=2.65$) which showed a corresponding feminine bias. The one-way analysis of variance for the occupational instrument revealed no significant difference between males'

and females' mean ratings of others, indicating no rater bias on the occupational measure.

Table 3 lists the interaction cell means. The means for the personality trait and occupational scales are plotted in Figures 1 and 2 respectively according to males' and females' ratings of themselves, their ratings of members of the same sex, and their ratings of members of the opposite sex. On the personality trait measure there were significant differences ($p<.05$) between males' and females' ratings of themselves and between males' and females' ratings of members of the same sex. There was no significant difference, however, between males' and females' ratings of members of the opposite sex. These results show that, on the personality trait measure, greater differences were perceived between the sexes when they were rated by themselves or members of the same sex than when they were rated by the opposite sex. On the occupational measure the differences between males' and females' ratings of themselves, members of the same sex, and members of the opposite sex were all significantly different ($p<.05$).

DISCUSSION

The present findings show that rural high school students tend to stereotype according to sex when rating their peers on personality trait and occupational measures. This corroborates and extends earlier findings using abstract referents to measure stereotypes. The extent to which those stereotypes found when abstract referents were rated differ from those found when actual referents were rated still remains to be determined. This question might be addressed in the future by directly comparing the same students' ratings of both real and abstract referents.

The finding that males and females show a rater bias toward their respective stereotypes on the personality trait scale may indicate that each sex rates others according to the traits they see as being most important for themselves. For example, a recent study (Bernknopf, 1980) comparing the stereotypes of a behavior disordered group with those of a non-handicapped group found that the behavior disordered males saw themselves as less masculine than non-handicapped males. Behavior disordered females, however, saw themselves as more feminine than non-handicapped females. Bernknopf (1980) attributed this difference, in part, to the stress on human awareness and feelings which both behavior disordered males and females are continually exposed to in their curriculum. Since both are taught to value these feminine traits more than their non-handicapped counterparts, this bias appears in their ratings. The lack of rater bias according to sex on the occupational scale demonstrates a greater consensus between the sexes concerning what males or females should or should not do occupationally, reflecting the strong social norms that are part of our culture.

There were several inconsistencies between the findings of this study and the results of studies using conventional measures of sex-stereotyping. Rosenkrantz et al. (1968) found that, when rating the "average" male or female, males' and females' self-ratings were less stereotypical than their ratings of others of the same sex. More recently, using a modified version of the Personal Attributes Questionnaire (Spence, Helmreich & Stapp, 1974), Storms' (1979) results showed a similar pattern across all three subscales of the PAQ. Storms' findings also showed that self-ratings were less stereotypical than ratings of males and females made by the opposite sex. Since the M-F subscale of the PAQ corresponds most closely to the personality trait measure used in the present study, males' and females' mean ratings of themselves, members of the same sex, and members of the opposite sex were plotted for this subscale in Figure 3.

Comparing Figure 3 to the results from the personality trait measure as seen in Figure 1 reveals strikingly different patterns. While the results of this study showed a significant difference between males' and females' ratings of themselves and members of the same sex ($p < .05$), there was no significant difference in their ratings of the opposite sex. In contrast, the plot in Figure 3 represents the opposite trend: the greatest difference occurred when males and females rated the opposite sex, and the smallest difference occurred when they rated themselves.

We can suggest explanations for the discrepancies between the findings of the present study and the other studies just cited. First, conventional measures of sex-stereotyping used in other studies, by asking respondents to rate the "typical" or "average" male or female, may cause respondents to exaggerate actual differences in their perceptions of others. Another possible way to account for the present findings has to do with the teenage sample used

for this study. Since the teenage years are generally when individuals show a heightened need for peer approval, it may be that it was more important for the teenagers in this study to see themselves conforming to their idea of the masculine or feminine norm than it was to see their peers conforming to these norms. In contrast, the subjects in the other studies (Rosenkrantz et. al., 1968; Storms, 1979) represented older, college-age populations. Possibly as individuals mature, they develop a more androgynous perspective that causes them to view themselves less stereotypically than they view others. Whatever the case, the present results suggest that educators concerned about the effects of stereotyping among teenage populations need to be especially concerned about the influence of sex stereotypes on self-concepts.

In comparison with the findings on the personality trait measure, the results on the occupational measure showed the stereotypes to be much more extreme. Again, we may be seeing the effects of a more abstract frame of reference about occupations as opposed to a more concrete frame based on experience (actual personalities of acquaintances). Possibly student responses on the personality trait measure were less extreme because students were not only familiar with those they were rating but were rating them according to personality constructs the students have seen exemplified in both males and females. On the occupational measure, however, students were perhaps forced to rely more on stereotypical notions because they have only had a limited exposure to men or women in nontraditional occupational roles. In another study examining the occupational stereotypes of grade school children, Tibbetts (1975) found that several occupations that had previously been designated as male-appropriate occupations were rated as being appropriate for both males and females by many of the students. Tibbetts accounted for this

finding by the fact that many of the children had likely had some significant exposure to women in these particular roles. Perhaps familiarizing students with actual role models who have nontraditional occupations would help to minimize occupational stereotyping among high school students. This may be especially crucial in rural settings where students are less likely to see men and women in nontraditional occupations.

Although the results of this study question conventional approaches to examining sex-stereotypes, still measures that assess sex stereotypes using constructs that are personally relevant to each individual still need to be developed. In other words, it is possible that the bipolar adjectives selected for this and other measures do not actually represent the constructs that most people use to construe themselves or others. A truly valid measure would use personally relevant constructs for each individual. Allowing students to rate others according to constructs that have personal meaning may be possible by pursuing the methodology initially suggested by Kelly (1955). As well, the present study only examined students' ratings of their peers. Would similar results be found when students rated a demographic cross section of female and male acquaintances? These extensions of the present approach are necessary to better understand the perceptual factors involved in sex-stereotyping and eventually in career decision-making.

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Table 1

Analysis of Variance for Personality Traits

Source	Sum of Squares	df	Mean Square	F	p
Sex of Rater(S)	1.79	1	1.79	3.87	.05
Error b	46.59	101	.46		
Identity of Ratee(I)	1.89	2	.94	7.15	.001
S x I	1.23	2	.62	4.66	.01
Error w	85.59	648	.13		

Table 2

Analysis of Variance for Occupation

Source	Sum of Squares	df	Mean Square	F	p
Sex of Rater(S)	8.18	1	8.18	9.00	.003
Error b	91.80	101	.91		
Identity of Ratee(I)	373.76	2	171.88	445.00	<.001
S x I	53.85	2	26.93	69.71	<.001
Error w	250.29	648	.39		

Table 3

Means and Standard Deviations of

Males' and Females' Ratings on

Personality Trait and Occupational Scales

	Sex of Rater					
	Males		Females			
	$\bar{X}$	SD	$\bar{X}$	SD		
Personality Traits					Mean	SD
Self	2.42	.428	2.81	.369	2.61	.444
Males	2.45	.436	2.59	.413	2.52	.430
Females	2.63	.435	2.70	.401	2.66	.422
Mean(s)	2.52	.444	2.67	.409	2.59	.433
Occupations						
Self	1.92	.507	3.51	.676	2.69	1.000
Males	2.10	.712	1.97	.539	2.03	.640
Females	3.61	.791	3.66	.666	3.64	.734
Mean(s)	2.77	1.062	2.93	1.026	2.84	1.098

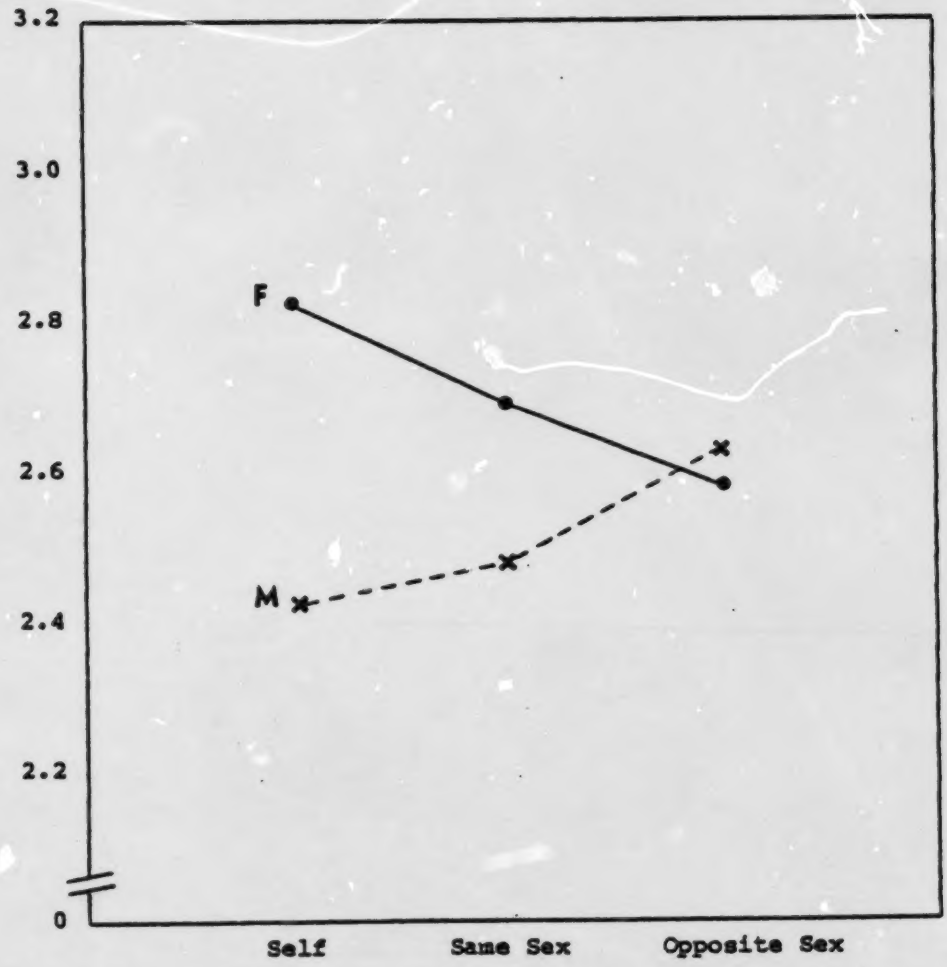

Figure 1. Self, same sex and opposite sex ratings by males and females on the personality trait scale.

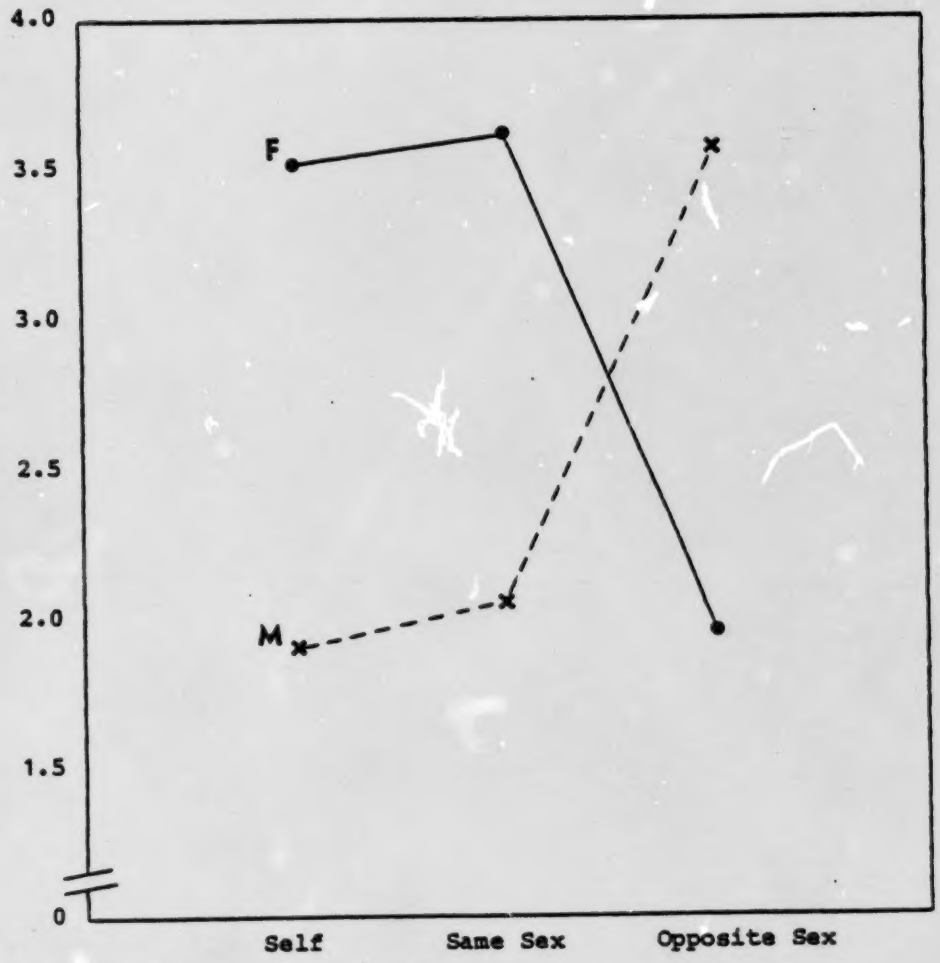

Figure 2. Self, same sex and opposite sex ratings by males and females on the occupational scale.

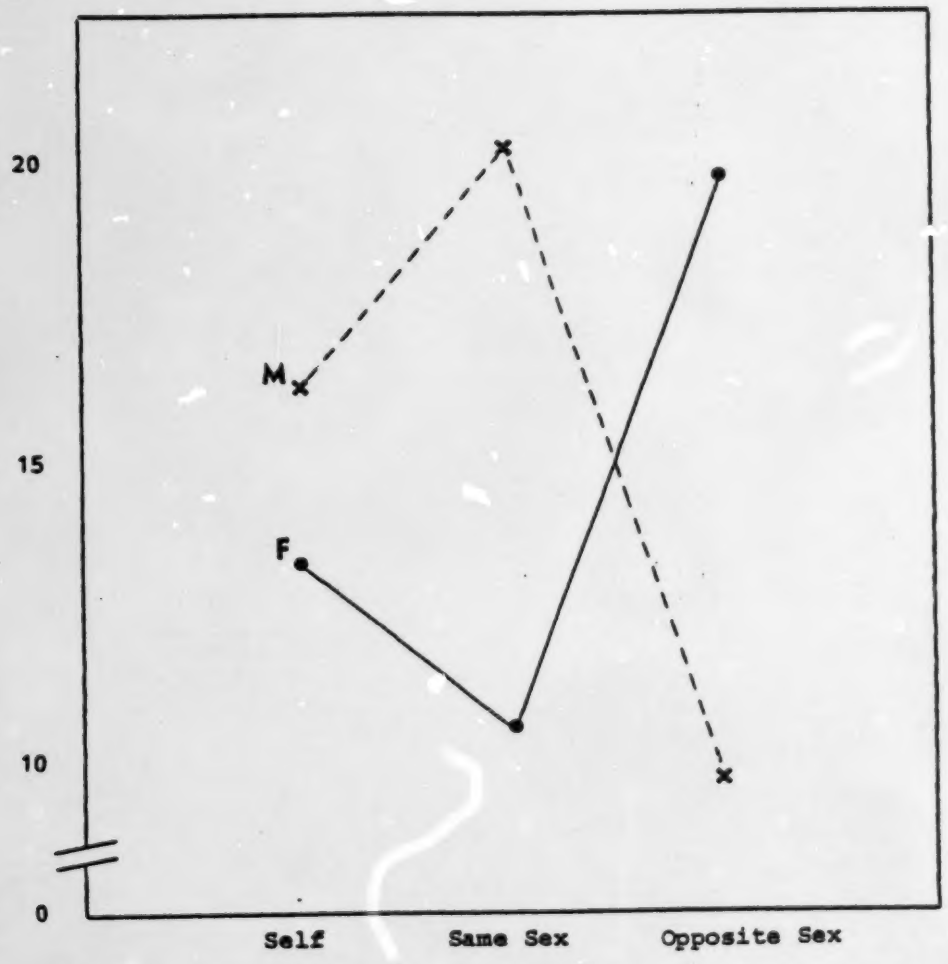

Figure 3. Self, same sex and opposite sex ratings by males and females on the PAQ M-F scale.